Application No. 10/775,542
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THE SPECIFICATION

Please amend the paragraph on page 6, line 17, to page 7, line 14, to read as follows:

The one or more eductors 14 are preferably as shown in U.S. patent 5,795,146 which is assigned to the assignee of the present invention and the disclosure of which is incorporated herein by reference. The eductors provide high volume flow necessary for improved temperature uniformity and control and can provide a thermal uniformity of plus or minus 5°C during the process cycle. In one embodiment, the furnace 10 is a batch furnace shown in cross-section in Fig. 2, for containing a quantity of materials to be processed. The furnace comprises a housing 30 enclosing insulative material 32 which surrounds a furnace chamber 24. A furnace hearth 36 supports an assembly 38 which holds a quantity of materials to be processed. The hearth is mounted on a moveable assembly 40 which can be moved upward into the furnace chamber and lowered downward to a position in which the hearth and the product contained thereon ~~is~~ are outside of the furnace chamber for loading and unloading of the materials. An elevator mechanism (not shown) is employed to move the hearth between upper and lower positions. The elevator mechanism may include ~~on~~ one or more lead screws or other mechanisms known in the art. A plurality of electrically energized radiant heaters 42 are disposed in the furnace chamber along the two sides thereof, each heater being suspended from an opening in an upper wall of the furnace. Each heater has electrical terminals 44 above the upper wall of the furnace chamber, these terminals being connectable to an

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electrical power source (not shown) for energizing the heaters. A microwave input port 46 is provided in the furnace chamber and is coupled to a microwave source to introduce microwave energy into the chamber for heating of the product.

Please amend the paragraph on page 10, lines 13-27, to read as follows:

During the initial portion of the heating cycle, moisture is driven from the materials being processed. As an example, such moisture release usually occurs in a temperature range of about 125-150°C. As the temperature continues to rise, binder removal occurs during which solvents, plasticizers and other constituents of the binder material are volatilized. A ~~Typical~~ typical range for such binder removal is about 275-375°C. The removal of binder material usually leaves a carbon residue which is volatilized at temperatures of about 500-600°C. Sintering of the material occurs at the highest temperature level of the process cycle. In the illustrated embodiment, a temperature of about 950° is shown which is a typical temperature for processing LTCC materials. For processing solid oxide fuel cells, a sintering temperature is about 1550°C as shown in dotted outline in Fig. 3.